

### **REMARKS**

This responds to the Office Action dated July 19, 2007.

Claims 1, 2, 8, 10, 14, 29, 36, 37, 46, and 49 are amended. Claims 1-55 remain pending in this application.

#### **General Comments in the Claim Rejections**

The Office Action states, in paragraphs 2 and 10: “It is noted that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform.” Given that “the ability to so perform” is required, it is unclear what is meant by “not a positive limitation”. Regardless, it is noted that many rejections in the Office Action do not assert that a recited element has “the ability to so perform” its specifically recited function and/or do not indicate how each cited reference discloses that ability. For example, in paragraph 7, the Office Action asserts that Scheiner discloses “a processor capable of identifying the relationship between the two impedances”, but does not assert whether and how Scheiner discloses, for example, a processor adapted to calculate a confidence level as recited in claim 11, and a processor adapted to identifying a relationship between the two ventilation rates as recited in various claims. Therefore, Applicant respectfully requests a specific ground to support each rejection for each claim in the next official communication, or withdrawal of the rejection.

No distinction between ventricular rate and impedance is made in the Office Action (for example, for the rejection of claim 25, which recites ventricular rates as originally filed). Though a ventricular rate may be derived from an impedance signal, it is not equivalent to the impedance signal, and the relationship (including similarity, comparison, etc.) between two ventilation rates is not equivalent to the relationship between two impedances. Therefore, with respect to each rejection of a claim reciting a relationship between two ventilation rates, Applicant respectfully requests specific indications on how each cited reference discloses the relationship between two ventilation rates, as opposed to impedances or ventilation signals, in the next official communication, or withdrawal of the rejection.

*§102 Rejection of the Claims Using Scheiner*

Claims 1, 3-8 and 10-55 were rejected under 35 U.S.C. § 102(b) for anticipation by Scheiner et al. (U.S. Publication 2002/0147475, herein "Scheiner").

*Claim 1*

Claim 1 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, a processor adapted to identify a relationship between first ventilation rate and second ventilation rate and generate a code as a function of the relationship between the first ventilation rate and the second ventilation rate, as recited in claim 1.

The Office Action states, in paragraph 7, that "Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10)." However, claim 1 recites relationship between ventilation rates, in contrast to the alleged "relationship between two impedances".

Applicant respectfully requests reconsideration and allowance of claim 1.

*Claims 3-8 and 10*

Applicant respectfully traverses the rejection. Claims 2-6 and 9-10 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2-6 and 9-10.

Applicant respectfully requests reconsideration and allowance of claims 2-6 and 9-10.

*Claim 11*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, a processor adapted to evaluate the signal received from each

sensor and calculate a confidence level as a function of the signal received from each sensor, as recited in claim 11.

More specifically, the Office Action does not indicate, and Applicant is unable to find, how the cited portions of Scheiner disclose a processor adapted to calculate a confidence level.

Applicant respectfully requests reconsideration and allowance of claim 11.

#### *Claims 12-13*

Applicant respectfully traverses the rejection. Claim 13 is dependent on claim 11, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 11 is incorporated herein to support the patentability of claim 13.

Applicant respectfully requests reconsideration and allowance of claim 13.

#### *Claim 14*

Claim 14 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, a processor adapted to determine a first ventilation rate using the first signal, determine a second ventilation rate using the second signal, and identify a relationship between the first ventilation rate and the second ventilation rate and generate a code as a function of the relationship, as recited in claim 14.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).” However, claim 14 recites relationship between ventilation rates, in contrast to the alleged “relationship between two impedances”.

Applicant respectfully requests reconsideration and allowance of claim 14.

#### *Claims 15-20*

Applicant respectfully traverses the rejection. Claims 15-16 and 19-20 are dependent on claim 14, which is believed to be allowable for at least the reasons set forth above. Therefore,

the discussion above for claim 14 is incorporated herein to support the patentability of claims 15-16 and 19-20.

Applicant respectfully requests reconsideration and allowance of claims 15-16 and 19-20.

#### *Claim 21*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, a processor adapted to receive a first ventilation signal, a second ventilation signal and a first acceleration signal and adapted to generate a code based on a detected similarity between the first ventilation signal, the second ventilation signal and the first acceleration signal, as recited in claim 21.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).” However, claim 21 recites similarity between ventilation and acceleration signals, in contrast to relationship between only impedances, and similarity is not equivalent to relationship.

Applicant respectfully requests reconsideration and allowance of claim 21.

#### *Claims 22-24*

Applicant respectfully traverses the rejection. Claims 23-24 are dependent on claim 21, which is not rejected under 35 U.S.C. §102(e). Applicant respectfully submits that because claim 23-24 includes each and every element of claim 21, they cannot be anticipated by Scheiner if claim 21 is not anticipated by Scheiner.

Applicant respectfully requests reconsideration and allowance of claims 23-24.

#### *Claim 25*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because no reason is given in support of the rejection. Claim 25 is indicated as being rejected in paragraph 6 of the Office Action, but the

rejection is not further discussed in the following paragraphs. Applicant respectfully requests a proper ground to support the rejection, or withdrawal of the rejection.

Applicant respectfully requests reconsideration and allowance of claim 25.

#### *Claims 26-28*

Applicant respectfully traverses the rejection. Claims 26 and 28 are dependent on claim 25, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 25 is incorporated herein to support the patentability of claims 26 and 28.

Applicant respectfully requests reconsideration and allowance of claims 26 and 28.

#### *Claim 29*

Claim 29 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, a processor adapted to determine a first ventilation rate using the first impedance signal and a second ventilation rate using the second impedance signal and further adapted to identify a similarity between the first ventilation rate and the second ventilation rate and store a code having a value based on the similarity, as recited in claim 29.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).” However, claim 29 recites a processor adapted to identify a similarity between ventilation rates, in contrast to the alleged “relationship between two impedances”.

Applicant respectfully requests reconsideration and allowance of claim 29.

#### *Claims 30-37*

Applicant respectfully traverses the rejection. Claims 30-34 are dependent on claim 29, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 29 is incorporated herein to support the patentability of claims 30-34.

Applicant respectfully requests reconsideration and allowance of claims 30-34.

#### *Claim 38*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, comparing a first signal and a second signal, delivering a first therapy regimen to the heart if a similarity is detected in the comparing, and receiving a third signal based on activity of the heart and delivering a second therapy regimen to the heart if the similarity is not detected in the comparing, the third signal received from a third sensor and the second therapy regimen selected as a function of the third signal, as recited in claim 38.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).”

However, claim 38 recites similarity, but not mere relationship.

Additionally, the Office Action does not indicate, and Applicant is unable to find in the cited portions of Scheiner, the recited third signal based on activity of the heart, the second therapy regimen selected as a function of the third signal, and the delivering a second therapy regimen to the heart if the similarity is not detected, as recited in claim 38.

Applicant respectfully requests reconsideration and allowance of claim 38.

#### *Claims 39-45*

Applicant respectfully traverses the rejection. Claims 39-40 and 44-45 are dependent on claim 38, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 38 is incorporated herein to support the patentability of claims 39-40 and 44-45.

Applicant respectfully requests reconsideration and allowance of claims 39-40 and 44-45.

#### *Claim 46*

Claim 46 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, using a processor to detect a similarity between signals of a plurality of input signals including at least a first ventilation rate and a second ventilation rate, and delivering therapy to the heart based on the detected similarity, as recited in claim 46.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).” However, claim 46 recites a similarity between signals of a plurality of input signals including at least a first ventilation rate and a second ventilation rate, in contrast to the alleged “relationship between two impedances”.

Applicant respectfully requests reconsideration and allowance of claim 46.

#### *Claims 47-52*

Applicant respectfully traverses the rejection. Claims 51-52 are dependent on claim 46, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 46 is incorporated herein to support the patentability of claims 51-52.

Applicant respectfully requests reconsideration and allowance of claims 51-52.

#### *Claim 53*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Scheiner do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, processor means adapted to generate a code as a function of a detected similarity between a first ventilation signal, a second ventilation signal and a first acceleration signal, as recited in claim 53.

The Office Action states, in paragraph 7, that “Scheiner discloses ... a processor capable of identifying the relationship between the two impedances (e.g. ¶ 66; Figs 9 and 10).” However, claim 53 recites similarity between ventilation and acceleration signals, in contrast to the alleged “relationship between the two impedances”.

Applicant respectfully requests reconsideration and allowance of claim 53.

#### *Claims 54-55*

Applicant respectfully traverses the rejection. Claim 55 is dependent on claim 53, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 53 is incorporated herein to support the patentability of claim 55.

Applicant respectfully requests reconsideration and allowance of claim 55.

#### *§102 Rejection of the Claims Using Daum*

Claims 1-6, 9-11, 13-16, 19-20, 23-26, 28-34, 38-40, 44-46, 51-53 and 55 were rejected under 35 U.S.C. §102(e) for anticipation by Daum et al. (U.S. Patent No. 7,101,339, herein “Daum”)

#### *Claim 1*

Claim 1 has been amended to better describe the recited subject matter

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a processor adapted to identify a relationship between first ventilation rate and second ventilation rate and generate a code as a function of the relationship between the first ventilation rate and the second ventilation rate, as recited in claim 1.

The Office Action states, in paragraph 13, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11), ... a generated ventilation signal (Col. 2, ll. 3-11)”. However, claim 1 recites relationship between ventilation rates, in contrast to the alleged “relationship between impedances”. The “generated ventilation signal” does not make impedances equivalent to ventilation rates.

Applicant respectfully requests reconsideration and allowance of claim 1.



*Claims 2-6 and 9-10*

Applicant respectfully traverses the rejection. Claims 2-6 and 9-10 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2-6 and 9-10.

Applicant respectfully requests reconsideration and allowance of claims 2-6 and 9-10.

*Claim 11*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a processor adapted to evaluate the signal received from each sensor and calculate a confidence level as a function of the signal received from each sensor, as recited in claim 11.

More specifically, the Office Action does not indicate, and Applicant is unable to find, how the cited portions of Daum disclose a processor adapted to calculate a confidence level. Regarding the processor adapted to calculate a confidence level, the Office Action states, under Response to Arguments, in paragraph 2, that “Daum discloses a processor and sensing capabilities that are capable of performing the stated task”. However, Applicant is unable to find in the cited portions of Daum a processor that is capable of calculating the confidence level as recited in claim 11.

Applicant respectfully requests reconsideration and allowance of claim 11.

*Claim 13*

Applicant respectfully traverses the rejection. Claim 13 is dependent on claim 11, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 11 is incorporated herein to support the patentability of claim 13.

Applicant respectfully requests reconsideration and allowance of claim 13.

*Claim 14*

Claim 14 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a processor adapted to determine a first ventilation rate using the first signal, determine a second ventilation rate using the second signal, and identify a relationship between the first ventilation rate and the second ventilation rate and generate a code as a function of the relationship, as recited in claim 14.

The Office Action states, in paragraph 13, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11) ... a generated ventilation signal (Col. 2, ll. 3-11)”. However, claim 14 recites relationship between ventilation rates, in contrast to the alleged “relationship between impedances”. The “generated ventilation signal” does not make impedances equivalent to ventilation rates.

Applicant respectfully requests reconsideration and allowance of claim 14.

*Claims 15-16 and 19-20*

Applicant respectfully traverses the rejection. Claims 15-16 and 19-20 are dependent on claim 14, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 14 is incorporated herein to support the patentability of claims 15-16 and 19-20.

Applicant respectfully requests reconsideration and allowance of claims 15-16 and 19-20.

*Claims 23-24*

Applicant respectfully traverses the rejection. Claims 23-24 are dependent on claim 21, which is not rejected under 35 U.S.C. §102(e). Applicant respectfully submits that because claim 23-24 includes each and every element of claim 21, they cannot be anticipated by Daum if claim 21 is not anticipated by Daum.

Applicant respectfully requests reconsideration and allowance of claims 23-24.

*Claim 25*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, identifying a first relationship between a first ventilation rate and a second ventilation rate, and generating a code as a function of the first relationship, as recited in claim 25.

The Office Action states, in paragraph 13, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11), ... a generated ventilation signal (Col. 2, ll. 3-11)”. However, claim 25 recites relationship between ventilation rates, in contrast to the alleged “relationship between impedances”. The “generated ventilation signal” does not make impedances equivalent to ventilation rates.

Applicant respectfully requests reconsideration and allowance of claim 25.

*Claims 26 and 28*

Applicant respectfully traverses the rejection. Claims 26 and 28 are dependent on claim 25, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 25 is incorporated herein to support the patentability of claims 26 and 28.

Applicant respectfully requests reconsideration and allowance of claims 26 and 28.

*Claim 29*

Claim 29 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a processor adapted to determine a first ventilation rate using the first impedance signal and a second ventilation rate using the second impedance signal and

further adapted to identify a similarity between the first ventilation rate and the second ventilation rate and store a code having a value based on the similarity, as recited in claim 29.

The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11), ... a generated ventilation signal (Col. 2, ll. 3-11)”. However, claim 29 recites a processor adapted to identify a similarity between ventilation rates, in contrast to the alleged “relationship between impedances”. The “generated ventilation signal” does not make impedances equivalent to ventilation rates.

Applicant respectfully requests reconsideration and allowance of claim 29.

#### *Claims 30-34*

Applicant respectfully traverses the rejection. Claims 30-34 are dependent on claim 29, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 29 is incorporated herein to support the patentability of claims 30-34.

Applicant respectfully requests reconsideration and allowance of claims 30-34.

#### *Claim 38*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, comparing a first signal and a second signal, delivering a first therapy regimen to the heart if a similarity is detected in the comparing, and receiving a third signal based on activity of the heart and delivering a second therapy regimen to the heart if the similarity is not detected in the comparing, the third signal received from a third sensor and the second therapy regimen selected as a function of the third signal, as recited in claim 38.

The Office Action states, in paragraph 13, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, claim 38 recites similarity but not mere relationship.

Additionally, the Office Action does not indicate, and Applicant is unable to find in the cited portions of Daum, the recited third signal based on activity of the heart, the second therapy

regimen selected as a function of the third signal, and the delivering a second therapy regimen to the heart if the similarity is not detected, as recited in claim 38.

Applicant respectfully requests reconsideration and allowance of claim 38.

#### *Claims 39-40 and 44-45*

Applicant respectfully traverses the rejection. Claims 39-40 and 44-45 are dependent on claim 38, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 38 is incorporated herein to support the patentability of claims 39-40 and 44-45.

Applicant respectfully requests reconsideration and allowance of claims 39-40 and 44-45.

#### *Claim 46*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Scheiner, among other things, using a processor to detect a similarity between signals of a plurality of input signals including at least a first ventilation rate and a second ventilation rate, and delivering therapy to the heart based on the detected similarity, as recited in claim 46.

Claim 46 is rejected in paragraph 14 of the Office Action without a specific reason. The Office Action states, in paragraph 14, that “pacemakers and defibrillators inherently have a pulse generator and therapy circuitry.” However, claim 46 does not merely recite “a pulse generator and therapy circuitry”. The Office Action does not indicate where and how Daum discloses using a processor to detect a similarity between at least ventilation rates and delivering therapy based on the detected similarity, as recited in claim 46. Therefore, the rejection is also respectfully traversed as an improper conclusory statement made without a specific ground.

Applicant respectfully requests reconsideration and allowance of claim 46.

*Claims 51-52*

Applicant respectfully traverses the rejection. Claims 51-52 are dependent on claim 46, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 46 is incorporated herein to support the patentability of claims 51-52.

Applicant respectfully requests reconsideration and allowance of claims 51-52.

*Claim 53*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, processor means adapted to generate a code as a function of a detected similarity between a first ventilation signal, a second ventilation signal and a first acceleration signal, as recited in claim 53.

Claim 53 is rejected in paragraph 17 of the Office Action without a specific reason. The Office Action states, in paragraph 17, that “Daum discloses that the system and method can be used internally, externally, or with any type of cardiac rhythm management system and is capable of being configured to a thorax (Col. 2, ll. 50-61).” It is unclear what this statement is intended to show with respect to claim 53. The Office Action does not assert whether and how Daum discloses processor to generate a code as a function of a detected similarity between ventilation and acceleration signals as recited in claim 53. Therefore, the rejection is also respectfully traversed as an improper conclusory statement made without a specific ground.

Applicant respectfully requests reconsideration and allowance of claim 53.

*Claim 55*

Applicant respectfully traverses the rejection. Claim 55 is dependent on claim 53, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 53 is incorporated herein to support the patentability of claim 55.

Applicant respectfully requests reconsideration and allowance of claim 55.

*§102 Rejection of the Claims Using Wang*

Claims 1-4, 6, 9-11, 14, 16, 25-26, 29-32, 38-40, 44 and 51 were rejected under 35 U.S.C. §102(e) for anticipation by Wang et al. (U.S. Publication 2005/0080460, herein “Wang”)

*Claim 1*

Claim 1 has been amended to better describe the recited subject matter

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, a processor adapted to identify a relationship between first ventilation rate and second ventilation rate and generate a code as a function of the relationship between the first ventilation rate and the second ventilation rate, as recited in claim 1.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, claim 1 recites relationship between ventilation rates, in contrast to the alleged “impedance measurements”.

Applicant respectfully requests reconsideration and allowance of claim 1.

*Claims 2-4, 6, and 9-10*

Applicant respectfully traverses the rejection. Claims 2-6 and 9-10 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2-6 and 9-10.

Applicant respectfully requests reconsideration and allowance of claims 2-6 and 9-10.

*Claim 11*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, a processor adapted to evaluate the signal received from each

sensor and calculate a confidence level as a function of the signal received from each sensor, as recited in claim 11.

More specifically, the Office Action does not indicate, and Applicant is unable to find, how the cited portions of Wang disclose a processor adapted to calculate a confidence level. Applicant is unable to find in the cited portions of Wang a processor that is capable of calculating the confidence level as recited in claim 11.

Applicant respectfully requests reconsideration and allowance of claim 11.

#### *Claim 14*

Claim 14 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, a processor adapted to determine a first ventilation rate using the first signal, determine a second ventilation rate using the second signal, and identify a relationship between the first ventilation rate and the second ventilation rate and generate a code as a function of the relationship, as recited in claim 14.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, claim 14 recites relationship between ventilation rates but not relationship between impedances, and Applicant is unable to find in the cited portions of Wang a processor adapted to generate a code as a function of the relationship between ventilation rates.

Applicant respectfully requests reconsideration and allowance of claim 14.

#### *Claim 16*

Applicant respectfully traverses the rejection. Claims 15-16 and 19-20 are dependent on claim 14, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 14 is incorporated herein to support the patentability of claims 15-16 and 19-20.



Applicant respectfully requests reconsideration and allowance of claims 15-16 and 19-20.

#### *Claim 25*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, identifying a first relationship between a first ventilation rate and a second ventilation rate, and generating a code as a function of the first relationship, as recited in claim 25.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, claim 25 recites relationship between ventilation, in contrast to the alleged “impedance measurements”.

Applicant respectfully requests reconsideration and allowance of claim 25.

#### *Claim 26*

Applicant respectfully traverses the rejection. Claims 26 and 28 are dependent on claim 25, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 25 is incorporated herein to support the patentability of claims 26 and 28.

Applicant respectfully requests reconsideration and allowance of claims 26 and 28.

#### *Claim 29*

Claim 29 has been amended to better describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, a processor adapted to determine a first ventilation rate using the first impedance signal and a second ventilation rate using the second impedance signal and

further adapted to identify a similarity between the first ventilation rate and the second ventilation rate and store a code having a value based on the similarity, as recited in claim 29.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, claim 29 recites a processor adapted to identify a similarity between ventilation rates, in contrast to the alleged “impedance measurements”.

Applicant respectfully requests reconsideration and allowance of claim 29.

#### *Claims 30-32*

Applicant respectfully traverses the rejection. Claims 30-34 are dependent on claim 29, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 29 is incorporated herein to support the patentability of claims 30-34.

Applicant respectfully requests reconsideration and allowance of claims 30-34.

#### *Claim 38*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, comparing a first signal and a second signal, delivering a first therapy regimen to the heart if a similarity is detected in the comparing, and receiving a third signal based on activity of the heart and delivering a second therapy regimen to the heart if the similarity is not detected in the comparing, the third signal received from a third sensor and the second therapy regimen selected as a function of the third signal, as recited in claim 38.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, the Office Action does not indicate, and Applicant is unable to find in the cited portions of Wang the recited third signal based on activity of the heart, the second therapy regimen selected as a function of the third signal, and the delivering a second therapy regimen to the heart if the similarity is not detected, as recited in claim 38.

Applicant respectfully requests reconsideration and allowance of claim 38.

*Claims 39-40, 44, and 51*

Applicant respectfully traverses the rejection. Claims 39-40 and 44-45 are dependent on claim 38, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 38 is incorporated herein to support the patentability of claims 39-40 and 44-45.

Applicant respectfully requests reconsideration and allowance of claims 39-40 and 44-45.

*Claim 53*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of anticipation because the cited portions of Wang do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang, among other things, processor means adapted to generate a code as a function of a detected similarity between a first ventilation signal, a second ventilation signal and a first acceleration signal, as recited in claim 53.

The Office Action states, in paragraph 18, that “Wang discloses ... a processor to cross-check impedance measurements using two different impedance measurements (e.g. ABSTRACT; ¶¶ 35-40, 116)”. However, claim 53 recites similarity between ventilation and acceleration signals, in contrast to only the alleged “impedance measurements”.

Applicant respectfully requests reconsideration and allowance of claim 53.

*Claim 55*

Applicant respectfully traverses the rejection. Claim 55 is dependent on claim 53, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 53 is incorporated herein to support the patentability of claim 55.

Applicant respectfully requests reconsideration and allowance of claim 55.

*§103 Rejection of the Claims Using Scheiner and Hine*

Claims 22, 37, and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Scheiner in view of Hine et al. (U.S. Patent No. 7,142,919, herein “Hine”).

Applicant respectfully traverses the rejection. Claims 22, 37, and 54 are dependent on base claims that are believed to be allowable for at least the reasons set forth above. It is believed that the addition of Hine does not remedy the deficiency of Scheiner as discussed above for these base claims. Therefore, the discussion above for the base claims are incorporated herein to support the patentability of claims 22, 37 and 54.

Applicant respectfully requests reconsideration and allowance of claims 22, 37 and 54.

*§103 Rejection of the Claims Using Wang and Hine*

Claims 7-8, 12, 17-18, 21-24, 27, 35-37, 41-43, 47-50, and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Hine.

*Claim 21*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a proper *prima facie* case of obviousness because the cited portions of Wang and Hine, individually or in combination, do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Wang and Hine, individually or in combination, among other things, a processor adapted to receive a first ventilation signal, a second ventilation signal and a first acceleration signal and adapted to generate a code based on a detected similarity between the first ventilation signal, the second ventilation signal and the first acceleration signal, as recited in claim 21.

The Office Action states, in paragraph 26: “Wang fails to disclose an impedance monitoring system that includes an activity sensor. However, Hine discloses a lead system that utilizes impedance, transthoracic impedance, and acceleration in variable pacing (Col. 6, ll. 1-67).” However, claim 21 recites a processor adapted to generate a code based on a detected similarity between ventilation and acceleration signals, as opposed to merely a system sensing both ventilation and acceleration signals. The Office Action does not assert, and Applicant is unable to find where and how Wang and Hine disclose a processor adapted to generate a code based on a detected similarity between the first ventilation signal, the second ventilation signal and the first acceleration signal, as recited in claim 21.

Applicant respectfully requests reconsideration and allowance of claim 21.

*Claims 7-8, 12, 17-18, 22-24, 27, 35-37, 41-43, 47-50, and 54*

Applicant respectfully traverses the rejection. Claims 7-8, 12, 17-18, 22-24, 27, 35-37, 41-43, 47-50, and 54 are dependent on base claims that are believed to be allowable for at least the reasons set forth above. It is believed that the addition of Hine does not remedy the deficiency of Wang as discussed above for these base claims. Therefore, the discussion above for the base claims are incorporated herein to support the patentability of claims 7-8, 12, 17-18, 22-24, 27, 35-37, 41-43, 47-50, and 54.

Applicant respectfully requests reconsideration and allowance of claims 7-8, 12, 17-18, 22-24, 27, 35-37, 41-43, 47-50, and 54.

*Reservation of the Right to Swear Behind References*

Applicant reserves its right to swear behind any references which are cited in a rejection under 35 U.S.C. §§102(e) and 103/102(e). Statements distinguishing the claimed subject matter over the cited references are not to be interpreted as admissions that the references are prior art.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6965 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 373-6965

Date

10-18-2007

By

Zhengnian Tang  
Reg. No. 55,666

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 18<sup>th</sup> day of October 2007.

Name

Signature